Amendments to the Claims

The Claim Listing below replaces all prior versions of the claims in the subject application.

Claim Listing:

1 (currently amended). A sound location detecting system, comprising:

a first microphone located at a first location to detect acoustic waves at the first location;

a second microphone located at a second location to detect the acoustic waves at the second location;

multiple reflectors having acoustically reflective surfaces of an irregular shape that provide additional phase variation, resulting in improved spatial distinction during analysis, said reflectors structured and arranged to reflect the acoustic waves in a direction such that the acoustic waves contact and are detected by both ~~of~~ the first microphone and the second microphone;

an acoustic analysis device to detect and analyze the acoustic waves; and

a processing device to determine a spatial location of a source of the acoustic waves using the Generalized Cross Correlation PHAse Transform and in response to the spatial location of the source to at least one of delay an output of the first or second microphone, or selectively disable the first or second microphone.

2. (cancelled).

3. (original) The sound location detecting system according to claim 1, wherein the at least one acoustically reflective surface is shaped like a human pinnea.

4. (original) The sound location detecting system according to claim 1, wherein the at least one acoustically reflective surface has low acoustic absorption properties.

5. (previously presented). The sound location detecting system according to claim 1, wherein the processing device directs an observation device to the spatial location of the source of the acoustic waves.

6. (original). The sound location detecting system according to claim 1, further including a calibration device to create a set of phase signature tables associating phase angles, between when the acoustic waves reach the first microphone and when the acoustic waves reach the second microphone, with detected frequencies at a

predetermined spatial location.

7. (currently amended). A method of determining a spatial location of a source of acoustic waves, comprising:

detecting, with a first microphone, acoustic waves at a first location;

detecting, with a second microphone, acoustic waves at a second location;

reflecting, with multiple reflectors having acoustically reflective surfaces of an irregular shape that provide additional phase variation, resulting in improved spatial distinction during analysis, the acoustic waves in a direction of the first location and the second location such that the acoustic waves contact and are detected by both the first microphone and the second microphone;

analyzing the acoustic waves; and

determining a spatial location of a source of the acoustic waves using the Generalized Cross Correlation PHAse Transform, and in response to the spatial location of the source, at least one of delaying an output of the first or second microphone, or selectively disabling the first or second microphone.

8. (cancelled).

9. (original). The method according to claim 7, wherein the at least one acoustically reflective surface has low acoustic absorption properties.

10. (previously presented). The method according to claim 7, wherein further comprising directing an observation device to the determined spatial location of the source of the acoustic waves.

11. (previously presented). The method according to claim 7, further comprising creating a set of phase signature tables associating phase angles, between when the acoustic waves reach the first location and when the acoustic waves reach the second location, with detected frequencies at a predetermined spatial location.

12. (currently amended). A sound location detecting device, comprising:

a computer-readable medium; and

a computer-readable program code, stored on the computer-readable medium, having instructions to

detect, with a first microphone, acoustic waves at a first location;

detect, with a second microphone, acoustic waves at a second location;

analyze the acoustic waves received from multiple reflectors having acoustically reflective surfaces of an irregular shape that provide additional phase variation, resulting in improved spatial distinction during analysis, said reflectors structured and arranged to reflect the acoustic waves in a direction such that the acoustic waves contact and are detected by both ~~of~~ the first microphone and the second microphone; and

determine a spatial location of a source of the acoustic waves using the Generalized Cross Correlation PHAse Transform, and in response to the spatial location of the source to at least one of delay an output of the first or second microphone, or selectively disable the first or second microphone.

13. (original). The sound location detecting device according to claim 12, wherein at least one acoustically reflective surface is utilized to reflect the acoustic waves.

14. (cancelled).

15. (original). The sound location detecting system according to claim 13, wherein the at least one acoustically reflective surface has low acoustic absorption properties.

16. (previously presented). The sound location detecting system according to claim 12, wherein the computer-readable program code includes instructions to direct an observation device to the determined spatial location of the source of the acoustic

waves.

17. (cancelled).

18. (original). The sound location detecting system according to claim 12, wherein the computer-readable program code includes instructions to create a set of phase signature tables associating phase angles, between when the acoustic waves reach the first location and when the acoustic waves reach the second location, with detected frequencies at a predetermined spatial location.

19 – 26 (cancelled).